STATE OF COLORADO

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Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

6/3/14

Dear Brenda Jarrell:

The Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division (APCD) is currently evaluating calendar year 2013 ambient ozone data for potential stratospheric ozone intrusion events and wildfire smoke events that may be considered for Exceptional Event status as defined by the Code of Federal Regulations (CFR) Title 40 Part 50 and 51. The APCD has identified seven stratospheric intrusion events and six wildfire smoke events in 2013, of which, one stratospheric intrusion event appears to have significantly affected the Southern Ute Indian Tribe's Ignacio ozone monitor.

The Exceptional Event Rule (EER) was published March 22, 2007 and became effective May 21, 2007. The EER allows for ambient air quality data which is submitted to AQS and used in making regulatory decisions, to be flagged, and where appropriate, excluded from calculations in determining whether an area has attained the National Ambient Air Quality Standards (NAAQS). The data flagged as "exceptional" must have been affected by an exceptional event, which is defined as an event that affects air quality, is not reasonably controllable or preventable, is an event caused by human activity that is unlikely to recur at a particular location or a natural event, and is determined by the EPA in accordance with 40 CFR 50.14 to be an exceptional event. The reporting agency has until July 1st of the year following the year in which the measurement occurred to flag the suspect measurement and add an initial description of the exceptional event. Subsequently, the responsible regulatory agency has up to 3 years from the time of the event to conduct analysis, prepare justification and submit documentation for EPA consideration of concurrence. Ultimately, only flagged events that are in excess of the current design values will be considered for justification documentation.

The following is a date and time range from the Ignacio ozone monitoring site, identified by the APCD, that has been influenced by a stratospheric ozone intrusion event. Hourly data from this site can be appropriately flagged in AQS with an "RO" (Stratospheric Ozone Intrusion) qualifier code and be associated with an AQS defined stratospheric intrusion event. If the Tribe elects to flag this data, it must be done by June 30th, 2014. In addition to the Ignacio site, the U.S. Forest Service Shamrock Mine site was also affected by this stratospheric intrusion event. The APCD is currently working with the Forest Service to flag ozone data from the Shamrock Mine site for this time period.

Stratospheric Ozone Intrusion Events ("RO" - Exclusion Flag)

6/1/13 Event

Ignacio (SUIT) *(08-067-7001)* *6/1/13, hour 9* *to* *6/1/13, hour 18*

Stratospheric ozone intrusion events are forecasted and documented by the APCD meteorologist for public advisories. Once an event is verified and data is validated, all 1 hour average data associated with the forward looking 8 hour averages in excess of 70 ppb are flagged with an RO or RT qualifier code in AQS. Additional 1 hour data points occurring prior to the 1 hour points associated with 8 hour averages in excess of 70 ppb may be identified to further clarify the start of the event. Data from Ignacio ozone monitor was obtained from AQS and evaluated using the same criteria as APCD data. The above listed data are a result of that evaluation.

To keep event descriptions consistent within AQS and in accordance with the "AQS Exceptional Event Tutorial -March 15, 2010" (http://www.epa.gov/ttn/airs/airsaqs/manuals/ExceptionalEventTutorial.pdf), the APCD has used the below language to individually define the above mentioned event in AQS. It is recommended that the Tribe use similar language when defining the above mentioned events in AQS.

AQS Event Description

Qualifier Code: "RO" (Stratospheric Ozone Intrusion)

Event Description:

"Stratospheric Ozone Intrusion Event – <*Event Start Date*> – Colorado APCD Investigation"

Or

"Wildfire Smoke Ozone Event - <*Event Start Date*> – Colorado APCD Investigation"

Event Start Date: Beginning date of effected data (YYYYMMDD)

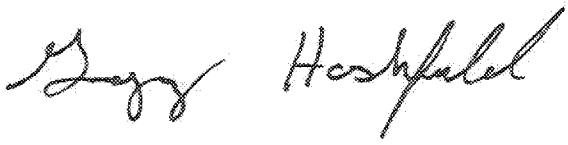
Event End Date: Ending date of effected data (YYYYMMDD)

Comments: (for individual events)

> **Comment for 6/1/13 Event (Stratospheric Intrusion – "RO"):**
> "An intense upper-level low centered over the Upper Midwest continued to sweep a tropopause fold into Colorado causing likely stratospheric enhancement of surface ozone concentrations. This meteorological condition is not controllable."

The APCD is offering this information to the Southern Ute Indian Tribe as a courtesy, and the decision to flag this data resides solely with the Tribe. If the Tribe flags this data, and if the APCD chooses to develop an exceptional event justification document for this event, then the inclusion of the Ignacio site into the exceptional event justification document can be performed with approval from the Tribe. All exceptional event justification documents developed by APCD will be submitted to EPA for concurrence. The APCD appreciates your consideration in these matters. Please feel free to contact me with questions or comments.

Regards,



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